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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/691,416
Filing Date: October 22, 2003
Appellant(s): KELLEY, PATRICK W.

**MAILED
DEC 11 2007
GROUP 1700**

Thomas E. Kelley
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 09/07/07 appealing from the Office action mailed 12/04/06.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

4,913,473	Bonnema	04-1990
5,253,458	Christian	10-1993
5,728,330	Erwin	03-1998

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

(1) Claims 1 and 4-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Christian (USPN 5,253,458) in view of Bonnema (USPN 4,913,473).

Christian teaches simulated logs formed from a pipe made of PVC (polyvinyl chloride) (See abstract and col. 3, lines 31-38). Christian further teaches that the pipes are pre-cast with a simulated log design to include knots, cracks and wood grains (e.g. having a diameter deviation). Christian fails to teach that the log is made of at least 80% thermoplastics comprising at least one of polyethylene or polypropylene and is silent on the diameter and length of the simulated log.

Bonnema teaches a large diameter molded plastic pipe which may be made of high-density polyethylene, PVC or polypropylene (col. 8, lines 46-52).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention, to substitute polypropylene or polyethylene thermoplastics that are disclosed in Bonnema for the PVC used in the simulated log taught by Christian since the reference specifically teaches that polypropylene or polyethylene may be substituted for PVC as a suitable material for making plastic pipes and because the Christian reference discloses that such plastic pipes are used to make the simulated logs.

With respect to the claimed diameter deviation, it has been held that that matters relating to ornamentation only which have no mechanical function cannot be relied upon to patentably distinguish the claimed invention from the prior art. See MPEP 2144.04. In the present case, the diameter deviation serve no mechanical functions, but are related to merely aesthetic purposes. Accordingly, this limitation is not seen to distinguish over the applied prior art.

Although Christian does not specifically disclose the claimed diameter or length of the simulated log, absent a showing of criticality, it would have been obvious to a person of ordinary skill in the art at the time of the invention to optimize the length and diameter (result effective variables) through routine experimentation. It has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). With regard to the claimed properties, it expected that the disclosed materials would exhibit these properties, since they are the same materials as claimed by applicant.

(2) Claims 1 and 4-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Christian (USPN 5,253,458) in view of Erwin (USPN 5,728,330).

Christian was discussed above and fails to teach that the log is made of at least 80% thermoplastics comprising at least one of polyethylene or polypropylene and is silent on the diameter and length of the simulated log.

Erwin teaches simulated wood products comprising polyethylene, PVC or polypropylene outer layers (col. 4, lines 55-61). That is, Erwin teaches the functional equivalence of polyethylene, polypropylene and PVC in the manufacture of simulated wood products.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention, to substitute polypropylene or polyethylene thermoplastics that are disclosed in Erwin for the PVC used in the simulated log taught by Christian, since the reference specifically teaches that polypropylene or polyethylene may be substituted for PVC as a suitable material for simulated wood products, such as those disclosed by Christian.

With respect to the claimed diameter deviation, it has been held that that matters relating to ornamentation only which have no mechanical function cannot be relied upon to patentably distinguish the claimed invention from the prior art. See MPEP 2144.04. In the present case, the diameter deviation serve no mechanical functions, but are related to merely aesthetic purposes. Accordingly, this limitation is not seen to distinguish over the applied prior art.

Although Christian does not specifically disclose the claimed diameter or length of the simulated log, absent a showing of criticality, it would have been obvious to a person of ordinary skill in the art at the time of the invention to optimize the length and diameter (result effective variables) through routine experimentation. It has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). With regard to the claimed properties, it expected that the disclosed materials would exhibit these properties, since they are the same materials as claimed by applicant.

(3) Claims 1 and 4-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Erwin (USPN 5,728,330).

Erwin teaches simulated wood products. The articles of Erwin comprise an outer polymer shell, wherein the polymer layer may be selected from polymers including polyethylene and polypropylene (abstract and col. 4, lines 55-61, for instance). Moreover, the polymer shell may comprise a mixture of these material and additional polymeric components. Therefore, it would have been obvious to one having ordinary skill in the art to form the product of Erwin from polyethylene, polypropylene or mixtures including these materials, as presently claimed, since Erwin suggests such materials. That being done, the recited flexural modulus would be

inherent in the resulting product, since the product would be made from the same material as presently claimed.

With respect to the claimed diameter deviation, it has been held that that matters relating to ornamentation only which have no mechanical function cannot be relied upon to patentably distinguish the claimed invention from the prior art. See MPEP 2144.04. In the present case, the diameter deviation serves no mechanical functions, but is related to merely aesthetic purposes. Accordingly, this limitation is not seen to distinguish over the applied prior art.

Although Erwin does not specifically disclose the claimed diameter or length of the simulated products, absent a showing of criticality, it would have been obvious to a person of ordinary skill in the art at the time of the invention to optimize the length and diameter (result effective variables) through routine experimentation. It has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

(10) Response to Argument

(A) Claims 1 and 4-13 are obvious over Christian in view of Bonnema

Appellant first asserts that the plastic logs of Christian are "obviously larger than a 2 inch diameter log use[d] for a fence post or rail" (Appeal Brief at page 4). The present claims, however, are directed to plastic logs having an average diameter of "greater than 2 inches" (claim 1, line 1, for instance). Thus, while appellant appears to assert that the plastic logs of Christian are larger than those claimed, this is not the case, since, by appellant's statement, the plastic logs of Christian have a diameter of "greater than 2 inches," as presently claimed.

Next, appellant asserts that the plastic logs of Christian do not have a diameter deviation in the range of 2 to 60%, as presently claimed, asserting that the logs of Christian have a substantially uniform surface dimension. As noted above, with respect to the claimed diameter deviation, it has been held that that matters relating to ornamentation only which have no mechanical function cannot be relied upon to patentably distinguish the claimed invention from the prior art. See MPEP 2144.04. In the present case, the diameter deviation serves no mechanical function, but is related to merely aesthetic purposes. Accordingly, this limitation is not seen to distinguish over the applied prior art.

Moreover, assuming, *arguendo*, that the claimed diameter deviation serves a mechanical function, Christian explicitly states that "it is to be realized that the optimum dimensional relationships for the parts of the invention, to include variations in size, materials, shape, form . . . are deemed readily apparent and obvious to one skilled in the art" (col. 4, lines 34-40). Thus, assuming that the claimed diameter deviation is not merely ornamental, which the Examiner does not concede, Christian provides a suggestion to modify the "size, materials, shape, form" etc. of the plastic log to achieve a log that has a realistic appearance.

Next, appellant argues that Christian fails to teach that a polyolefin selected from the group consisting of polyethylene and polypropylene. It is for this reason that Christian was not applied alone, but rather, in view of Bonnema. As noted above, Bonnema teaches the functional equivalence of PVC, disclosed by Christian, and polyethylene and polypropylene. Accordingly, it would have been obvious to substitute polyethylene or polypropylene for the PVC of Christian, since Bonnema teaches the functional equivalence of these materials.

Additionally, appellant asserts that Christian recognized "no explicit need" for the claimed flexural strength. This characteristic, however, would appear to necessarily follow from selecting polyethylene. Since the combination of Christian in view of Bonnema suggests polyethylene and polypropylene as functional equivalents of PVC, the resultant article would inherently possess the claimed characteristic. Whether or not Christian recognizes the characteristic is not germane to the present inquiry. Moreover, one of ordinary skill in the art would have found it prima facie obvious to select an appropriate polyethylene, including polyethylenes having the recited the flexural moduli, for use as an artificial log.

Appellant additionally argues that the claimed diameter deviation is not merely ornamentation. Appellant has failed, however, to demonstrate that the claimed diameter deviation serves a mechanical function. Appellant merely reiterates the position posited previously in prosecution that the deviation serves to define a log. This function is clearly ornamental in nature and not mechanical. Accordingly, appellant's arguments are not persuasive.

Next, appellant argues that the plastic log suggested by the applied combination of references could not function as fencing (Appeal Brief at the paragraph bridging pages 6 and 7). This is not persuasive. Appellant is not here claiming fencing, but rather, a plastic log having an average diameter of greater than 2 inches. The applied combination of references meets the claimed limitations.

Next, applicant argues that there is not suggestion in Bonnema that polypropylene or polyethylene would provide better performance in a plastic log, asserting that there must be some disclosure in Bonnema that these materials would be superior to PVC. Clearly, this is not the case. As noted above, the prior art teaches the functional equivalence of polypropylene,

polyethylene and PVC. Accordingly, to employ these materials is prima facie obvious. There need be no teaching of superiority of the materials, only that they are equivalents in the art.

Applicant makes essentially the same argument with respect to Christian in view of Erwin. This argument is not persuasive for reasons discussed above.

(B) Claims 1 and 4-13 are obvious over Christian in view of Erwin

Appellant argues that Erwin fails to cure the alleged deficiencies of Christian, since Erwin fails to teach the claimed diameter deviation or polyolefin. As noted above, the claimed diameter deviation is merely ornamental in nature and serves no mechanical function.

Accordingly, this limitation is not seen to distinguish over the applied prior art. Regarding the polyolefin, as noted above, Erwin teaches the functional equivalence of PVC, taught by Christian, and polyethylene or polypropylene. Accordingly, the applied combination of references suggests the use of polyethylene or polypropylene in the article of Christian.

(C) Claims 1 and 4-13 are obvious in view of Erwin

Regarding this ground of rejection, appellant merely asserts that "Erwin does not teach any of the characteristics of plastic logs." Appellant then follows this with the merely conclusory statement that "[t]here is simply no teaching or suggestion in Erwin to lead a person of ordinary skill in the art to the claimed subject matter." As to the first point, Appellant has failed to present arguments as to the propriety of the Examiner's position and, accordingly, the Examiner maintains the position of record. Moreover, appellant has failed to present arguments supporting the conclusory statement regarding Erwin. Accordingly, this ground of rejection is maintained.

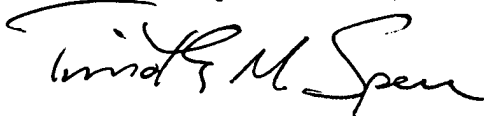
(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Timothy M. Speer



Conferees:

/Romulo H. Delmendo/

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KEITH D. HENDRICKS
SUPERVISORY PATENT EXAMINER